

Pre-packaged

solution

# **WISMO GSM/GPRS/EDGE** OS 6.61/Q2687





## EDGE AHEAD, WITH OPEN AT®

This pre-packaged solution has it all: huge processing power, Open AT<sup>®</sup>, the world's most powerful cellular embedded application environment, and Wavecom Operating System 6.61 supporting Internet connections and Bluetooth. Compatible with all GSM networks across the world, the OS6.61/Q2687 is the most compact customizable quadband GSM/GPRS/EDGE solution available on the market. Powered by an ARM9 processor, it provides even more MIPS than any ARM7 based solutions along with Real Time Management capability and extended connectivity features (such as parallel interface).

With EDGE high speed data technology, the OS6.61/Q2687H solution has the performance, flexibility and adaptability you need for your next M2M, mobile computing or PDA application. Microsoft<sup>®</sup> Windows<sup>®</sup> Mobile<sup>™</sup> compatibility ensures seamless integration with a wide range of Microsoft<sup>®</sup> enabled applications. Interchangeable with the OS6.60/Q2686H solution, it offers the extended temperature range needed for hostile industrial environments and meets RoHS environmental standards.

## WIRELESS COMPUTING POWER

## **Embed your application**

Get the power you need with the new 32 bit, 104MHz ARM9 processor. Save time and space by using fourth generation Eclipse based Open AT<sup>®</sup> tools to speed up development.

Use new Download-Over-the-Air capability for Open AT<sup>®</sup> and operating system upgrades & enhancements.

#### **Power Mode Flexibility**

Extend battery life with low consumption and 9 high performance power modes.

Match application processing needs versus battery life.

#### **Extended connectivity**

Benefit from simultaneous use of 2 UARTs, USB 1.1, PCM, 2 ADCs, 1 DAC, 2 SPIs,  $I^2C$  and up to 44 GPIOs.



MAKE IT WIRELESS



OPEN AT

With OS6.60/Q2686H



#### WIRELESS PROCESSING POWER

- ARM 946E-S, 32bit, 104MHz, 30MIPS On board memory: Q2687H: 32 Mbit Flash/8 Mbit RAM
- Open AT<sup>®</sup> Memory (Q2687H): 1.2MByte ROM, 256kByte RAM, 128kByte Object

#### **OPERATING SYSTEM**

- OS Version 6.61
- Open AT<sup>®</sup> 4.1
- RIL software for Microsoft<sup>®</sup>
- 9 Power Modes
- Switchable processor clock speed: 26MHz,
- 52MHz, 78MHz, 104MHz
- Real Time OS
  - 1ms Latency to interrupt
  - Precision timers
- More than 350 AT commands & APIs
- RTC with Calendar
- Lilon NiCD and NiMH Battery Charger
- Internet Plug-In\*:
  - Email (POP3 & SMTP)
  - File Transfer (FTP)
  - TCP/IP/UDP/DNS
  - \*via API or AT#

#### **DOWNLOAD OVER THE AIR**

- DOTA Type 1 (Open AT<sup>®</sup> Application)
- DOTA Type 2 (Wavecom OS)

#### **CELLULAR FEATURES**

- Quad Band (850/900/1800/1900MHz)
- Quad Audio Codec (FR/HR/EFR/AMR)
- GSM CSD 14.4kbps
- GPRS Multislot Class 10, Class B
- EDGE Multislot Class 10, ClassB
- Enhanced AEC & Noise Reduction
- VDA2B audio compliance

#### INTERFACE

RF Connection: 50 Ω U.FL, IMP,

- Solder pad for RG178 cable
- I/F Connector: 100pin Panasonic
  - USB 1.1
  - 2 x UART
  - PCM Digital Audio Interface
  - 2 x Analogue Audio (2 mic, 2 spkr)
  - 2 x ADC (10bit, 0-2V)
  - 1 x DAC
  - Up to 44 GPIO
  - Buzzer output
  - 2 x Interrupt
  - LED driver
  - 5 x 5 Keyboard
  - 2 x SPI
    I<sup>2</sup>C
  - 3V/1.8V SIM
  - Parallel bus

Power Supply: 3.6VDC nominal - 1.7A peak

#### **APPROVAL & QUALITY**

- Regulatory: R&TTE directive, GCF-CC, CE marking, FCC, PTCRB, China RTE
- Manufacturing: ISO TS 16949
- Quality : ISO 9001
- Carrier Approvals:
- www.wavecom.com/approvals

#### **OPEN AT® ECLIPSE** DEVELOPERS SUITE

- Installer
- Open AT<sup>®</sup> Project Wizard
- Eclipse environment
- CDT C++ Plug-In
  Open AT<sup>®</sup> Settings
- Application
- Remote Task Monitor
- HTML Help
- Sample Applications
- Documentation

#### **ENVIRONMENT AND** MECHANICS

Green Policy: RoHS Compliant Directive 2002/95/EC

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- Temperature: Class A -20°C to + 55°C Class B -40°C to + 85°C Storage -40°C to + 85°C Temperature autodiagnostic
- Fully RF shielded
- Size: 40 x 32.2 x 4mm
- Weight: <9g</p>

#### **DEVELOPMENT KIT**

- Open AT<sup>®</sup> Eclipse Developers Suite
- 2 x Q2687H
- Development board
- Handset & cable
- Quad band antenna
- Serial cable
- Power cable & supply
- Documents on CD

#### PRE-PACKAGED SOLUTIONS

- M2M410: Open AT<sup>®</sup> + Internet Plug-In\*
  M2M412: Open AT<sup>®</sup> + IBM MQ Telemetry Transport\*
- M2M413: Open AT<sup>®</sup> + Orange M2M Connect\*
- M2M415: M2M410 + Bluetooth Plug-In
- GTi800: Open AT<sup>®</sup> + MMI Developer Suite \*both library and binary versions supplied

#### SUPPORT & SERVICES

www.wavecom.com/support Design Validation, Certification Assistance, IMEI Download, OS and Open AT<sup>®</sup> Preload, Wavecom University (Open AT® Courses), and Code Review

## **IPR COVERAGE**

From the day we embarked on our business model, we set out to offer our customers protection against claims from holders of essential GSM intellectual property rights (IPR). Our negotiations with patent holders has resulted in substantial license coverage for all of the technologies offered in our products.

WAVECOM S.A. may, at any time and without notice, make changes or improvements to the products and services offered and/or cease producing or commercialising them.



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